

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A colloidal solution preparing method for forming colloidal particles by boiling a solution containing a metal salt and a reducing agent,

wherein the concentration of the metal salt in said solution is 1×10^{-4} mol/L or more and less than 4×10^{-4} mol/L; the equivalent concentration of the reducing agent is four times or more and 20 times or less the equivalent concentration of the metal salt; and the reaction time ~~is 60~~ is 120 minutes or more and 300 minutes or less,

wherein the metal salt is a platinum salt;

platinum colloidal particles are formed; and

an average diameter of the platinum colloidal particles is 1 to 5 nm.

2. (Currently Amended) A colloidal solution preparing method for forming colloidal particles by boiling a solution containing a metal salt and a reducing agent,

wherein the concentration of the metal salt in said solution is 4×10^{-4} mol/L or more and less than 6×10^{-4} mol/L; the equivalent concentration of the reducing agent ~~in four~~ is four times or more and 20 times or less the equivalent concentration of the metal salt; and the reaction time ~~is 30~~ is 90 minutes or more and 150 minutes or less,

wherein the metal salt is a platinum salt;

platinum colloidal particles are formed; and

an average diameter of the platinum colloidal particles is 1 to 5 nm.

3. (Cancelled)

4. (Currently Amended) A colloidal solution preparing method for forming colloidal particles by boiling a solution containing a metal salt and a reducing agent,

wherein the concentration of the metal salt in said solution is 4×10^{-4} mol/L or more and less than 6×10^{-4} mol/L; the equivalent concentration of the reducing agent ~~in twice~~ is twice or more and less than four times the equivalent concentration of the metal salt; and the reaction time is 60 minutes or more and 120 minutes or less,

wherein the metal salt is a platinum salt;

platinum colloidal particles are formed; and

an average diameter of the platinum colloidal particles is 1 to 5 nm.

5. (Currently Amended) A colloidal solution preparing method for forming colloidal particles by boiling a solution containing a metal salt and a reducing agent,

wherein the concentration of the metal salt in said solution is 6×10^{-4} mol/L or more and 15×10^{-4} mol/L or less; the equivalent concentration of the reducing agent ~~in twice~~ is twice or more and less than four times the equivalent concentration of the metal salt; and the reaction time ~~is 30~~ is 120 minutes or more and 240 minutes or less,

wherein the metal salt is a platinum salt;

platinum colloidal particles are formed; and

an average diameter of the platinum colloidal particles is 1 to 5 nm.

6. (Currently Amended) A colloidal solution preparing method for forming colloidal particles by boiling a solution containing a metal salt and a reducing agent,

wherein the concentration of the metal salt in said solution is 4×10^{-4} mol/L or more and less than 6×10^{-4} mol/L; the equivalent concentration of the reducing agent is once or more and less than twice the equivalent concentration of the metal salt; and the reaction time is 60 minutes or more and 120 minutes or less,

wherein the metal salt is a platinum salt;

platinum colloidal particles are formed; and

an average diameter of the platinum colloidal particles is 1 to 5 nm.

7. (Currently Amended) A colloidal solution preparing method for forming colloidal particles by boiling a solution containing a metal salt and a reducing agent,

wherein the concentration of the metal salt in said solution is 6×10^{-4} mol/L or more and 15×10^{-4} mol/L or less; the equivalent concentration of the reducing agent ~~in once is~~ once or more and less than twice the equivalent concentration of the metal salt; and the reaction time is 30 minutes or more and 120 minutes or less.

8. (Previously Presented) The colloidal solution preparing method according to claim 7 wherein said reducing agent is a citrate.

9. (Previously Presented) The colloidal solution preparing method according to claim 7 wherein the average particle diameter of said colloidal particles is 1.6 to 5 nm.

10. (Previously Presented) The carrier wherein colloidal particles are fixed on the surface of a substrate by applying the colloidal solution prepared by the method according to claim 7.

11. (Original) The carrier according to claim 10 wherein said substrate is glass fiber or scale-like glass.

12. (Previously Presented) The carrier according to claim 10 wherein said substrate is porous.

13. (Currently Amended) A method for manufacturing a fuel cell cathode wherein a colloidal solution is prepared in the state according to the colloidal solution preparing method claim 7, wherein a solution containing a metal salt and a reducing agent is boiled to remove dissolved oxygen is applied to a substrate, and colloidal particles are fixed on said substrate.

14. (Original) The method for manufacturing a fuel cell cathode according to claim 13, wherein said metal salt is chloroplatinic acid.

15. (Previously Presented) The method for manufacturing a fuel cell cathode according to claim 13, wherein said reducing agent is sodium citrate.

16. (Previously Presented) The method for manufacturing a fuel cell cathode according to claim 13, wherein the average particle diameter of said colloidal particles is 1.6 to 5 nm.

17. (Previously Presented) A fuel cell cathode manufactured using the method according to claim 13.

18. (Original) A fuel cell using the cathode according to claim 17.

19. (Currently Amended) A method for manufacturing a fuel cell anode wherein a colloidal solution is prepared in the state according to the colloidal solution preparing method claim 7, wherein a solution containing a metal salt and a reducing agent is boiled to remove dissolved oxygen is applied to a substrate, and colloidal particles are fixed on said substrate.

20. (Original) The method for manufacturing a fuel cell anode according to claim 19, wherein said metal salt is chloroplatinic acid.

21. (Previously Presented) The method for manufacturing a fuel cell anode according to claim 19, wherein said reducing agent is sodium citrate.

22. (Previously Presented) The method for manufacturing a fuel cell anode according to claim 19, wherein the average particle diameter of said colloidal particles is 1.6 to 5 nm.

23. (Previously Presented) A fuel cell anode manufactured using the method according to claim 19.

24. (Original) A fuel cell using the anode according to claim 23.

25. (Currently Amended) A method for preparing a low-temperature oxidation catalyst wherein a colloidal solution is prepared in the state according to the colloidal solution preparing method claim 7, wherein a solution containing a metal salt and a reducing agent is boiled to remove dissolved oxygen is applied to a substrate, and colloidal particles are fixed on said substrate.

26. (Original) The method for preparing a low-temperature oxidation catalyst according to claim 25 wherein said metal salt is chloroplatinic acid.

27. (Previously Presented) The method for preparing a low-temperature oxidation catalyst according to claim 25, wherein said reducing agent is sodium citrate.

28. (Previously Presented) The method for preparing a low-temperature oxidation catalyst according to claim 25, wherein the average particle diameter of said colloidal particles is 1.6 to 5 nm.

29. (Previously Presented) A low-temperature oxidation catalyst prepared using the method according to claim 25.

30. (Original) A fuel modifying device for a fuel cell using the low-temperature oxidation catalyst according to claim 29.

31. (New) The colloidal solution preparing method according to claim 1, wherein the average diameter of the platinum colloidal particles is less than 3.5 nm.

32. (New) The colloidal solution preparing method according to claim 2, wherein the average diameter of the platinum colloidal particles is less than 3.5 nm.

33. (New) The colloidal solution preparing method according to claim 4, wherein the average diameter of the platinum colloidal particles is less than 3.5 nm.

34. (New) The colloidal solution preparing method according to claim 5, wherein the average diameter of the platinum colloidal particles is less than 3.5 nm.

35. (New) The colloidal solution preparing method according to claim 6, wherein the average diameter of the platinum colloidal particles is less than 3.5 nm.

36. (New) The colloidal solution preparing method according to claim 7, wherein the average diameter of the platinum colloidal particles is less than 3.5 nm.

37. (New) The colloidal solution preparing method according to claim 7, wherein the average diameter of the platinum colloidal particles is 1.8 nm or less.

38. (New) The method for manufacturing a fuel cell anode according to claim 13, wherein the average diameter of the platinum colloidal particles is less than 3.5 nm.

39. (New) The method for manufacturing a fuel cell anode according to claim 19, wherein the average diameter of the platinum colloidal particles is less than 3.5 nm.

40. (New) The method for preparing a low-temperature oxidation catalyst according to claim 25, wherein the average diameter of the platinum colloidal particles is less than 3.5 nm.

41. (New) The method for manufacturing a fuel cell anode according to claim 13, wherein the average diameter of the platinum colloidal particles is 1.8 nm or less.

42. (New) The method for manufacturing a fuel cell anode according to claim 19, wherein the average diameter of the platinum colloidal particles is 1.8 nm or less.

43. (New) The method for preparing a low-temperature oxidation catalyst according to claim 25, wherein the average diameter of the platinum colloidal particles is 1.8 nm or less.